

## **ABSTRACT**

Concrete pavement of highways and streets is designed with preset strength safety level determined depending on the volumes of truck traffic. The choice of these levels results from the analysis of existing strength safety level of structural members of multi-story building frames basing on the processing of data of test results of thousands members of these frames. Thickness design of pavement with the preset strength safety level allows more complete utilization of flexural strength of concrete than that provided by the current design practice. More complete utilization of flexural strength of concrete means reduction of thickness of pavement by 8-10% as compared with that provided by the thickness design of these pavements according to Portland Cement Association Engineering Bulletin EB109P. Thickness design of concrete pavement with the preset strength safety level can be applied to any other methods of thickness design of concrete pavement as well as for PCA method.